ALBERTA FOUNDATION FOR NURSING RESEARCH

ANNUAL REPORT 1989 - 1990

BOARD OF DIRECTORS

91-04957/

NAME	REPRESENTING	APPOINTMENT
Dr. Joy Calkin, Vice-Chair Chair	University of Calgary	11/26/84 07/01/88
Dr. Marilynn Wood, Vice-Chair	University of Alberta	07/01/87 06/30/88
Ms. Islay Arnold	Public	10/06/82
Ms. Sheila Embury	Public	10/29/87
Ms. Mary Knox	Public	10/29/82
Dr. Pamela Brink	University of Alberta	06/20/89
Dr. Colleen Stainton	University of Calgary	06/20/89
Dr. Joanne Scholdra	University of Lethbridge	06/23/87
Ms. Carole Estabrooks	Alberta Association of Registered Nurses	10/24/89
Ms. Kathleen Oberle	Alberta Association of Registered Nurses	10/08/87
Ms. Hasana Birk	Alberta Public Health Association	06/20/89
Ms. Nora Greenley	Alberta Hospital Association	05/31/85

*Appointed by Ministerial Order, the 12 member board represents: general public (3); University of Alberta (2); University of Calgary (2); University of Lethbridge (1); Alberta Association of Registered Nurses (2); Alberta Public Health Association (1); and Alberta Hospital Association (1).

CARING – *The Almost Invisible Technology*

Technology is generally understood to be the knowledge and skill used in a particular field, and the machinery and other devices which are used as extensions of the human mind. We have tended to focus our studies in the health care field on visible technologies — devices such as equipment and drugs. In the Rainbow Report, however, Albertans were encouraged to seek technology that would be,

". . . the least intrusive and the most supportive to normal functioning while still most appropriate to the need for which it is to be used; necessary, timely, cost effective and affordable; efficient in freeing health providers' time for use in dealing directly on a personal level with patient needs; and widely applicable and conducive to increasing accessibility to health services." (Volume 2, Page 142)

Among the functions needed in the Province of Alberta, and indeed in all of Canada, is that of analyzing the technologies that we are using based on scientific findings, *"concerning the value of health technologies from various perspectives."* The knowledge of caring is one such technology. In the health care system, it is one of our least studied and understood technologies. We have often made the assumption that the provision of information prior to surgery; the judgment about when to provide pain medication; the timeliness of washing our hands; or, the organization of a safe and caring immunization clinic were not tasks worthy of scientific, nor technological consideration. Of course, we were incorrect. For example, the provision of certain information to patients prior to surgery has been demonstrated to reduce hospital stays by as much as 40 percent.

In 1981, the Government of Alberta responded to the proposal by the Alberta Association of Registered Nurses for the systematic development of nursing research, by setting aside $1 million for 5 years. The Alberta Foundation for Nursing Research (AFNR) was formed to administer these funds. In 1988, the Government renewed its commitment to nursing research by providing a minimum of $1 million to 1993. An additional sum of money was provided for one year to employ a nurse researcher to work with health care agencies throughout the province in the development and implementation of research.

So far, the range of research has been wide. Although some of the studies are apparently simple, their potential impact is considerable. In one hospital setting the effect of hand washing was studied. The focus of the study was not on whether hand washing is useful, and of course it is, but on a program encouraging staff to ensure hand washing techniques were properly followed. This small study was certainly *"necessary, timely, cost-effective and affordable"*. Infections and their transmission in institutions represent a serious cost, both in human and fiscal terms.

There is little doubt, cost reduction in the health care system will come from our understanding and implementation of sound findings related to health care; and, from an increased awareness that our health care system expectations are no longer tenable. The Premier's Commission on Future Health Care for Albertans believes it is necessary to continue and to broaden research if we are to improve our health care.

"Research is an invaluable part of a balanced, caring, and responsive system and a prerequisite for the system to be virtually self-renewing and sustainable." (Volume 2, Page 136)

The Commissioners understood major funding of research in Alberta and in Canada has been on *"medical"* research and on *cure*, rather than *care*. Albertans were urged to consider the necessity of expanding ways to improve the health care system. It was concluded:

(a) that the Alberta Heritage Foundation for Medical Research should be *"reviewed and expanded"* to include research in health care systems, health status, intervention outcomes, and promotion and prevention;
(b) that the name of the Foundation should be changed to the Alberta Heritage Foundation for Health Research to reflect its expanded mandate; and
(c) that the funding should be increased annually to accommodate this expanded mandate.

The AFNR Board now takes up the challenge of considering the recommendations regarding the Alberta Heritage Foundation for Medical Research, and the extent to which the recommendations should be inclusive or exclusive of the Alberta Foundation for Nursing Research.

Because caring is an almost invisible technology, it is little understood by the public as a scientific venture. Currently, it is unclear whether resources for nursing research should be combined with the very large resources of AHFMR in moving forward to improve practice in the health care field. While the growth of nursing research in Alberta has been a very positive result of government funding — there is a need to establish, on some permanent basis, funding for the technology of caring. Among the many nurses in this province, there is a growing awareness for the necessity of a knowledge-based practice. Such knowledge helps a nurse to make a decision, or choice, between the various alternatives that confront him or her in a patient care situation. Both hospital and community nursing must be studied.

In order to maximize our health care dollars, it is important to invest funds, time and people into the processes that will lead us to conclusions about the science of caring. Alberta has started down that road. It is a road down which we must, of necessity, continue.

Dr. Joy Calkin, RN, PhD
Chair

BOARD OF DIRECTORS REPORT

April 1, 1989 to March 31, 1990

The Board of Directors of the Alberta Foundation for Nursing Research (AFNR) met on three occasions during the reporting period. No major organizational changes occurred. The Board was pleased with the announcement by the Honourable Fred Stewart that AFNR funding for the fiscal year would be increased by $100,000 for Grants and Awards and by $20,000 for Administration. Thus, the year was one of stability and growth.

During the past year, the terms of two Board members expired: Dr. Nancy Grant (AARN) and Margaret King-Collier (APHA). The Board welcomed Carole Estabrooks representing the AARN and Hasana Birk representing the APHA, both appointed by the Minister.

The Scientific Review Committee (SRC) also underwent a number of changes in membership. Appointments included: Dr. T. O. Maguire, Department of Educational Psychology, University of Alberta; Dr. Sharon Ogden Burke, Faculty of Nursing, Queen's University; Dr. Ellen Hodnett, Faculty of Nursing, University of Toronto; and, Dr. Norma Stewart, Faculty of Nursing, University of Saskatchewan. Now for the first time in AFNR's history, all members of the SRC are Canadian — evidence of the maturation of nursing research in Canada.

The SRC met twice during the reporting period to consider proposals and to make recommendations to the Board of Directors. Based on SRC recommendations, the Board approved $256,423 in grants, as follows: 5 research projects totalling $229,423; 14 student bursaries totalling $17,000; and 2 facilitation grants totalling $10,000. Two important changes were made in the research projects category. The maximum award was increased from $50,000 to $85,000, and the maximum duration increased from 2 to 3 years.

An ongoing concern of the Board of Directors continues to be long-term funding for AFNR activities. In 1988, the Government of Alberta committed another $1,000,000 to nursing research, to be disbursed over a five year period. Although this commitment is greatly appreciated, the Board is without a guarantee of funding after the five year period expires. To ensure the continuation of AFNR, the Board has been working to secure guaranteed funding from Government, preferably in the form of an endowment. To that end, Dr. Joy Calkin, Chair of the Board, met with the Minister of Technology, Research and Telecommunications, the Honourable Fred Stewart to present a long range plan entitled *Proposal for the Future*, in which the need for secure funding in nursing research was outlined. Mr. Stewart will consider AFNR's proposal.

The Board was pleased to note that its nomination of Dr. Shirley Stinson for the Sir Frederick Haultain prize was successful. In awarding the $25,000 prize, Mr. Gogo, Minister of Advanced Education, said: *"Through this distinguished and prestigious award, the Province pays tribute to Albertans whose contributions are considered outstanding and whose work has touched the lives of many."* Among her many other contributions, Dr. Stinson was instrumental in the establishment of AFNR, and was the first Chair of the AFNR Board of Directors.

In an attempt to improve communications between AFNR and Alberta nurses, a series of articles about AFNR activities was prepared for the AARN Newsletter and a decision was made to reinstate the AFNR Newsletter. In these and other ways, the Board hopes to increase awareness of the Foundation and the importance of nursing research.

CLINICAL PROBLEM SOLVING THROUGH RESEARCH

"Clinical nursing research should be designed to answer practical questions of practising nurses". So says Rene Day, a nurse researcher who has received a number of grants from the Alberta Foundation for Nursing Research (AFNR). Dr. Day recently submitted to AFNR the final report on a study for which she and two co-investigators had received a facilitation grant. The study, to develop and evaluate a program to teach 12 handicapped grade one children about handwashing, was conducted while Dr. Day held a shared-cost joint appointment (initially funded by AFNR) with the Glenrose Rehabilitation Hospital.

Whereas contagious diseases such as colds, flu and ear infections are a problem for all school age children, they are a particular concern for handicapped children. The principal investigator, Margery Monsma, together with co-investigators Sheri St. Arnaud and Dr. Day, were interested in finding a way to reduce the spread of infectious disease in this population. Children in the study were taught when and how to wash their hands. Handwashing skills and frequency were evaluated at one, three and six months after the program.

Children's skills were seen to improve. They had fewer visits to the doctor, took fewer prescribed medicines and had fewer illnesses than for the same time period the previous year. An interesting offshoot of the study is that the children are now challenging the nurses about their handwashing techniques. Comments such as: "You can't touch me. I saw you blow your nose. Go and wash your hands first" have been heard!

Another study for which Dr. Day received an AFNR grant dealt with methods of preventing constipation in rehabilitation patients. Constipation is a serious problem for Glenrose patients. Approximately 10 percent of the institution's pharmacy budget is spent on stool softeners and laxatives.

In the pilot study looking at fibre content, Dr. Day and colleagues examined the total daily diet of 133 patients. Foods available (on the menu), foods chosen and foods eaten were recorded. As well, the investigators took note of who filled out the menu. As Dr. Day says, "The good news is that adequate fibre choices were available on the menu. However, the bad news is that patients weren't selecting or eating these items". As a result of the study, inservice sessions were planned for nurses to make them more aware of high fibre food choices and a pamphlet is being prepared for patients/families.

In view of the outcomes of the above study, Dr. Day and Glenrose staff designed a further pilot project funded by an AFNR facilitation grant. The study involves establishing the reliability and validity of an instrument to measure stool consistency. It may seem simple, but defining constipation turns out to be a complex problem. Does it have to do with frequency, or is stool consistency more important? If consistency is the main criterion, how "soft" is "soft"; how "hard" is "hard"? The instrument will be used in studies of constipation and will be a valuable addition to the research literature.

In a related study, members of the nursing staff will work with staff from a number of departments. The purpose will be to examine the effects of a natural laxative on children's requirements for stool softeners and laxatives. A concoction made of raisins, prunes, dates and figs, and with a consistency somewhat like jam has been developed. Adults trying the product were reported to like the flavour. In the study, the "jam" will be offered to paediatric patients. It is anticipated that children who eat the jam will require fewer stool softeners and laxatives. This study represents collaborative efforts to solve a serious problem in a simple way.

These interesting studies demonstrate that nursing research can be used to provide answers to important clinical questions. Dr. Day's enthusiasm and belief in the power of research helped to make the projects a reality. At present Dr. Day, who is Associate Dean, Undergraduate Education, University of Alberta Faculty of Nursing, continues to hold a joint appointment with the Glenrose, and will be pursuing some of her research interests there. She is also involved in designing an evaluation of the collaborative project between the Faculty of Nursing and hospital and college schools of nursing - an evaluation project that is expected to take ten years to complete.

Dr. Day's seemingly boundless energy and excitement about the potential of nursing research have resulted in a wide variety of successful clinical research endeavours, most of which have been supported at least in part by AFNR. (It should be noted that Dr. Day credits the development of a successful nursing research program at the Glenrose Rehabilitation Hospital to AFNR support.)

It is the practicality of the studies which makes them particularly interesting. These studies will provide answers to questions in which nurses are interested. The Alberta Foundation for Nursing Research is proud to have supported these projects as they clearly meet the Foundation's objectives.

WOMEN CAREGIVERS
Perceptions of Reciprocity in Social Networks

Anne Neufeld, RN, PhD
Margaret J. Harrison, RN, PhD

Women provide most of the care given to family members, an older person with cognitive impairment or a pre-term infant. Often these women have limited sources of support themselves. This study, funded by the Alberta Foundation for Nursing Research, explores the "give and take" present in the social relationships of women who care for such individuals.

"*The population of dependent older persons and pre-term infants is growing because of improvements in health care. The age group of 85 years and over is the fastest growing age group in our society. If we are to make prudent use of our health care dollars, we must learn how to care for the caregivers.*" A.N.

"*Women who perceive they have support are healthier. We need to determine what women perceive as support. Most of the research to date relates to the perceptions 'per se' — but we do not know how the support, or the lack of it, actually relates to a caregiver's wellbeing.*" M. H.

The demands placed on women caregivers may reduce the time and energy they have to establish and maintain supportive relationships. In addition, women caregivers may be reluctant to ask for help from existing sources of support when they may not be able to reciprocate.

In this study several interviews will be conducted with 40 women over a one year period. One group includes 20 women who are caring for an older person with cognitive impairment, the second group consists of 20 women who are caring for a pre-term infant. The perceptions of the two groups of women about their social support and the "give and take" in their relationships will be compared.

"An older child, and now an adult caregiver, may feel she is returning the care that she received as a child." A. N.

"What we would really like to do is help women in caregiving situations, and build or encourage the support necessary for them to maintain their health."
M. H./A. N.

Volunteers from both groups of caregivers were selected for the study through advertising in the public media and relevant health care agencies. Previous research has identified a relationship between social support and health. Understanding the process of social support for women caregivers can contribute to knowledge about the factors which enable women to continue to provide care for others while maintaining their personal health. This information is an important foundation for developing effective nursing interventions.

Dr. Anne Neufeld and Dr. Margaret Harrison are faculty members at the University of Alberta Faculty of Nursing. Dr. Neufeld's interests include health promotion and health education for older adults. Dr. Harrison's interests include nursing of families with infants and young children.

1989 AWARDS

The proposals which were approved for funding from the applications received for the March 1, 1989 and October 15, 1989 competitions are listed below.

PRINCIPAL INVESTIGATOR & CO-INVESTIGATOR(S)	AFFILIATED INSTITUTION OR AGENCY	PROJECT TITLE	FUNDING
RESEARCH PROJECT GRANTS			
ELLIOTT, Dr. Ruth	University of Alberta	Early Infant Crying: Child & Family Follow-up at Three Years	$ 49,805
FIELD, Dr. Peggy Anne DAY, Dr. Rene CAMPBELL, Ms. Iris	University of Alberta	Students into Nurses: Socialization in a University Nursing Program	$ 48,579
LANDER, Dr. Janice	University of Alberta	Clinical Judgments in Pain	$31,039
NEUFELD, Dr. Anne HARRISON, Dr. Margaret	University of Alberta	Women as Caregivers: Perceptions of Reciprocity in Social Networks	$ 50,000
OBERLE, Ms. Kathleen ALLEN, Dr. Marion LYNKOWSKI, Ms. Patricia	University of Alberta University of Alberta Hospitals	Follow-up of Day Surgery Patients	$ 50,000
FIVE AWARDS GRANTED			$229,423
FACILITATION GRANTS			
BRINK, Dr. Pamela	University of Alberta	The Fattening Room Among the Annang of Nigeria	$ 5,000
DAY, Dr. Rene	Glenrose Hospital	Reliability and Validity of a Stool Consistency Measurement Tool	$ 5,000
TWO AWARDS GRANTED			$ 10,000
STUDENT GRANTS			
APPLEGATE, Mary	University of Alberta	Privacy Attainment and Maintenance for the Long-Term Care Resident	$ 1,000
ASTLE, Barbara J.	University of Alberta	Relationship Between the Impact of Having a Visually Impaired Child and Parental Coping Behaviours	$ 1,000
CHAN, Monica	University of Alberta	The Effects of Three Different Positions of Arterial Oxygen and Relative Pulmonary Shunt in Post-Operative Coronary Artery Bypass Graft Patients	$ 1,000

PRINCIPAL INVESTIGATOR & CO-INVESTIGATOR(S)	AFFILIATED INSTITUTION OR AGENCY	PROJECT TITLE	FUNDING
COLE, Mollie	University of Alberta	Caring for the Disoriented Older Adult: The Family Caregivers' Perspective	$ 1,000
DUGGLEBY, Wendy	University of Alberta	P.C.A. for Post-Operative Hip Patients	$ 1,000
FINLAY, Cindy	University of Alberta	Transcutaneous Electric Nerve Stimulation for Thoracotomy Pain: A Comparison of Conventional TENS and Acupuncture-like TENS	$ 1,000
GUSHULIAK, Elizabeth T.	University of Alberta	Value Orientations of Hutterian Women in Canada	$ 1,000
HONISH, Agnes	University of Alberta	Relationship Between Information about Human Immunodeficiency Virus Antibody Status and Sexual Practices in Gay and Bisexual Men	$ 1,000
JENSEN, Louise	University of Alberta Clinical Nursing Research	Intervention Effect Analysis in	$ 2,000
LARRIVEE, Laverna M.	University of Alberta	The Relationship Between Cognitive Coping Strategies and Perceived Anxiety During Cardiac Catheterization	$ 1,000
OLSON, Karin	University of Alberta	The Identification of Factors That Inhibit and Promote Breast Self-Examination	$ 2,000
PAUL, Coral Lyanna	University of Alberta	Cultural Pluralism and Ethical Decision Making: The Annang of Southeastern Nigeria	$ 1,000
ROMYN, Donna	University of Alberta	Nursing Student's Knowledge and Attitudes Related to the Pharmacologic Management of Cancer Pain	$ 1,000
WALES, Marilyn A.	University of Texas at Austin	The Effect of Guided Imagery on Anxiety and Recovery of Myocardial Infarction Patients During Hospitalization and the Immediate Post Discharge Period	$ 2,000
14 AWARDS GRANTED			$ 17,000
TOTAL AWARDS GRANTED - 21			$256,423

GRANTS

The Foundation was awarded a research budget of $1 million dollars for the first five-year period beginning in the 1983/84 fiscal year. From that sum, the Board awarded grants amounting to $919,806.

The success of the program was such that in 1988, the Alberta government renewed its commitment to nursing research by providing an additional $1 million dollars.

The following table portrays grant funds awarded during the 7 years since the inception of the Foundation.

Table 1: Grant Funds Awarded to March 31, 1990

Category of Award	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	TOTAL
Research Project	13,216	25,000	188,090	239,745	129,538	200,469	229,423	1,025,481
Demonstration	1,379	0	0	0	0	22,519	0	23,898
Facilitation	1,420	9,296	17,075	17,450	29,130	9,333	10,000	93,704
Conference	0	25,000	5,860	10,000	28,180	0	0	69,040
Student Bursaries	3,000	5,000	7,500	7,500	23,000	24,000	17,000	87,000
Research Support Services	0	0	61,314	0	0	24,083	0	85,397
Research Trainee*	0	0	25,000	47,113	0	0	0	72,113
TOTAL FUNDS AWARDED	19,015	64,296	304,839	321,808	209,848	280,404	256,423	1,456,633

* Research Trainee Category discontinued at the end of 1986

Table 2: Funds Awarded April 1, 1989 - March 31, 1990

Category	Funds Awarded March Competition	Funds Awarded October Competition	TOTAL AWARDED
Research Projects	31,039	198,384	229,423
Facilitation Grants	10,000	0	10,000
Demo/Evaluation Projects	0	0	0
Conferences/Workshops	0	0	0
Student Research Bursaries	6,000	11,000	17,000
Research Support Services	0	0	0
TOTAL COMMITMENT	47,039	209,384	256,423

THE SCIENTIFIC REVIEW COMMITTEE

MEMBERS	FROM
Dr. Marilynn Wood, Chair	University of Alberta
Dr. Sharon Ogden Burke	Queens University
Dr. Ellen Hodnett	University of Toronto
Dr. T. O. Maguire	University of Alberta (non-nurse)
Dr. Norma Stewart	College of Nursing, Univ. of Sask.

The Scientific Review Committee is an advisory body to the Board of AFNR. Chaired by Board member Dr. Marilynn Wood, the committee is composed of four other researchers: three from nursing and one external-to-nursing. Members are chosen by the Board from nominations submitted to AFNR. The SRC serves in an advisory capacity to the Board in relation to proposals submitted to the twice-yearly competitions in March and October.

The Chairperson of the Scientific Review Committee assigns a primary and secondary reviewer to each application and for research projects and demonstration/evaluation grants selects a minimum of three external reviewers. External reviewers are selected based on their expertise in the field of the applicant and the reviewers critique each application very carefully.

Members of the SRC must have a record of experience and achievement in research. The list of external reviewers includes prominent researchers from both Canada and the United States.

Reviewers examine each application and complete a written evaluation, using the following questions as a guide.

1. What are the objectives of the research? How does it compare with state-of-the-art research in this field?
2. Is there a clear statement of the problem, hypothesis or research questions? Are the aims logical, realistic, and achievable?
3. Is there a complete and up-to-date literature review and an appropriate theoretical framework?
4. Is the approach valid? adequate? innovative? original?
5. Are data analysis plans appropriate and adequate?
6. What is the significance of the project for nursing theory development and clinical practice?
7. Is the investigator qualified to undertake this research and/or does he/she have appropriate consultants/support?
8. Are the facilities, equipment, and personnel described adequate for this project?
9. Is the budget realistic? Are the items justified and necessary for this project?
10. Is the proposed study relevant to the aims of AFNR, that is, can it be viewed as advancing the frontiers of nursing research?
11. Is the proposed study ethical? Has the proposal been approved by an ethics committee? Is further review (e.g. by a biohazards or biosafety committee) necessary?

At the SRC meetings, in-depth discussion is held regarding the scientific merit and relevance of each proposal resulting in a recommendation from the Committee. These recommendations are submitted to the Board of Directors for final decisions regarding funding.